IN THE CLAIMS:

The text of all pending claims is set forth below for the convenience of the Examiner.

1. (PREVIOUSLY PRESENTED) An apparatus generating a seek direction detecting signal for an optical pickup, comprising:

a light dividing unit dividing an incident light beam into at least two beams including a main beam and a sub-beam so that at least two beam spots including a main beam spot and at least one sub-beam spot having an optical aberration, can be focused in a track direction of an optical disk, wherein a direction of the optical aberration of the sub-beam spot is a tangential direction of the optical disk;

an optical detector unit including:

a first optical detector receiving the main beam, and converting the portions of the received beam into electrical signals independent of each other, and

a second optical detector receiving the sub-beam and converting the portions of the received beam into electrical signals independent of each other, wherein the first and second optical detectors comprise a plurality of light receiving portions;

a signal processing portion including:

a first signal processing portion processing a track error signal from the signals output from the first optical detector, and

a second signal processing portion processing a track cross signal from the signals output from the second optical detector; and

a generator generating the seek direction detecting signal from a phase difference between the track cross signal and the track error signal.

2. (PREVIOUSLY PRESENTED) The apparatus as claimed in claim 1, wherein the light receiving portions of the second optical detector are divided into at least three portions in a direction corresponding to a radial direction of the optical disk, and are divided into two portions in a direction corresponding to the tangential direction of the optical disk, where the light receiving portions include at least six separate areas.

3. (PREVIOUSLY PRESENTED) The apparatus as claimed in claim 1, wherein the light receiving portions of the second optical detector comprise

a first light receiving portion having a first outer light receiving portion and a first inner light receiving portion, which are divided in a direction corresponding to a radial direction of the

optical disk;

a second light receiving portion having a second outer light receiving portion and a second inner light receiving portion, which are disposed to neighbor the first light receiving portion and in the direction corresponding to the tangential direction of the optical disk;

a third light receiving portion having a third outer light receiving portion and a third inner light receiving portion, which are disposed to neighbor the second light receiving portion; and

a fourth light receiving portion having a fourth outer light receiving portion and a fourth inner light receiving portion, which are disposed to neighbor the first and third light receiving portions.

4. (PREVIOUSLY PRESENTED) The apparatus as claimed in claim 3, wherein each width of the first, second, third, and fourth inner light receiving portions is smaller than a radius of an incident beam spot focused on the optical detector.

5. (PREVIOUSLY PRESENTED) The apparatus as claimed in claim 4, wherein a sum of the widths of the first and fourth inner light receiving portions in the direction corresponding to the radial direction of the optical disk, and the sum of the widths of the second and third inner light receiving portions in the same direction are each 0.2 to 0.8 times a diameter of the incident beam spot focused on the optical detector.

6. (PREVIOUSLY PRESENTED) The apparatus as claimed in claim 3, wherein, when a sum signal of signals output from the first and fourth inner light receiving portions is $S_{(A2+D2)}$, the sum signal of signals output from the second and third outer light receiving portions is $S_{(B1+C1)}$, the sum signal of signals output from the first and fourth outer light receiving portions is $S_{(A1+D1)}$, and the sum signal of signals output from the second and third inner light receiving portions is $S_{(B2+C2)}$, the second signal processing portion comprises:

a first summing amplifier summing the signal $S_{(A2+D2)}$ and the signal $S_{(B1+C1)}$, and outputting a signal S_1;

a second summing amplifier summing the signal $S_{(A1+D1)}$ and the signal $S_{(B2+C2)}$, and outputting a signal S_2; and

a differential amplifier differentiating the signals S_1 and S_2, and outputting a track cross signal, where the second signal processing portion is adapted to generate the seek direction detecting signal by using the phase difference between the track cross signal output from the differential amplifier and the track error signal output from the first signal processing portion.

7-38 CANCELLED